Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A method for coding transform coefficients ~~in picture and/or video coders and decoders~~

wherein

for blocks of (video) pictures containing significant transform coefficients, the coding of transform coefficients takes place in such a way that, for each block,

- ~~in a scan process,~~ a significance mapping is arithmetically coded, the significance mapping specifying the positions of significant transform coefficients in the block in a scan order, the coding of the significance map comprising coding, in the scan order, - except for the last scan position in the scan order - a one-bit symbol (SIG) for each coefficient of the block and a one-bit symbol (LAST) for each significant coefficient of the block, wherein (SIG) serves for identifying significant coefficients and (LAST) indicates whether there are further significant transform coefficients in the block, and subsequently,

- in a reverse scan order - starting with the last significant transform coefficients within the block - the values (levels) of the significant transform coefficients are ~~determined and~~ arithmetically coded.

Claim 2 (original): The method according to claim 1,

wherein

each significant transform coefficient of the block other than the last transform coefficient of the block is characterized by a one-bit symbol.

Claim 3 (original): The method according to claim 1,

wherein

for each significant transform coefficient, the sign is indicated by a one-bit symbol (SIGN) and the magnitude is indicated by a binary-coded symbol (ABS).

Claim 4 (currently amended): The method according to claim 1,

wherein

the coding of the values of the transform coefficients comprises indicating the magnitude ~~is indicated by a symbol (ABS) in unary binarization or~~ by a symbol (ABS) having a prefix part and a suffix part, wherein the prefix part consists of ones and the suffix part is coded in a 0th order exp-golomb code.

Claim 5 (original): The method according to claim 1,

wherein

blocks containing significant transform coefficients are characterized by a one-bit symbol CBP4 in connection with further syntax elements, such as, for example, CBP or macro block mode.

Claim 6 (canceled)

Claim 7 (currently amended): The method according to claim [[~~6~~]]1,

wherein

modeling

- for the one-bit symbol CBP4,
- for coding the significance mapping and/or
- for coding the coefficient magnitudes

takes place in a context-dependent way.

Claim 8 (canceled)

Claim 9 (original): The method according to claim 1,

wherein

block types of transform coefficients having comparable statistics are summarized to block categories.

Claim 10 (currently amended): An arrangement having at least one of a processor ~~and/or~~ and a chip formed such that a method for coding transform coefficients ~~in picture and/or video coders and decoders~~ can be performed, wherein

for blocks of (video) pictures containing significant transform coefficients, the coding of transform coefficients takes place in such a way that, for each block,

- ~~in a scan process,~~ a significance mapping is arithmetically coded, the significance mapping specifying the positions of significant transform coefficients in the block in a scan order, the coding of the significance map comprising coding, in the scan order, - except for the last scan position in the scan order - a one-bit symbol (SIG) for each coefficient of the block and a one-bit symbol (LAST) for each significant coefficient of the block, wherein (SIG) serves for identifying significant coefficients and (LAST) indicates whether there are further significant transform coefficients in the block, and subsequently,

- in a reverse scan order - starting with the last significant transform coefficients within the block - the values (levels) of the significant transform coefficients

are ~~determined and~~ arithmetically coded.

Claim 11 (canceled)

Claim 12 (currently amended): A computer-readable storage medium on which a computer program is stored, enabling a computer, after having been loaded into the memory of the computer, to perform a method for coding transform

coefficients ~~in picture and/or video coders and decoders~~,

wherein

for blocks of (video) pictures containing significant transform coefficients, the coding of transform coefficients takes place in such a way that, for each block,

- ~~in a scan process,~~ a significance mapping is arithmetically coded, the significance mapping specifying the positions of significant transform coefficients in the block in a scan order, the coding of the significance map comprising coding, in the scan order, - except for the last scan position in the scan order - a one-bit symbol (SIG) for each coefficient of the block and a one-bit symbol (LAST) for each significant coefficient of the block, wherein (SIG) serves for identifying significant coefficients and (LAST) indicates whether there are further significant transform coefficients in the block, and subsequently,

- in a reverse scan order - starting with the last significant transform coefficients within the block - the values (levels) of the significant transform coefficients

are ~~determined and~~ arithmetically coded.

Claim 13 (canceled)

Claims 14-23 (canceled)

Claim 24 (currently amended): A method for coding transform coefficients in picture and/or video coders and decoders

wherein

for blocks of (video) pictures containing transform coefficients being unequal to zero, a coding of transform coefficients takes place in such a way that, for each block,

a significance map is coded, the significance map specifying the positions of transform coefficients being unequal to zero in the block in a scan order in a context-dependent way using contexts depending on the corresponding scan position of the transform coefficient considered, and subsequently,

in a reverse scan order, starting with the last transform coefficient being unequal to zero within the block, the values (levels) of the transform coefficients being unequal to zero are coded in a context-dependent way using contexts depending on a number of transform

coefficients already coded in the reverse scan order having a magnitude of 1 and a number of transform coefficients already coded in the reverse scan order having a magnitude of greater than 1, respectively.

Claim 25 (previously presented): The method according to claim 24,

wherein

when coding the significance map, each transform coefficient being unequal to zero in the scan order is characterized by a first one-bit symbol (SIG) serving to characterize transform coefficients being unequal to zero, i.e. each transform coefficient being unequal to zero including the last transform coefficient being unequal to zero in the scan order if it is different from the last transform coefficient of the block in the scan order, or excluding the last transform coefficient being unequal to zero in the scan order if it is the last transform coefficient of the block in the scan order, and the last transform coefficient being unequal to *zero* is characterized by a second one-bit symbol (LAST) indicating that the respective transform coefficient being unequal to *zero* is the last transform coefficient being unequal to zero in the scan order if it is different from the last transform

coefficient of the block in the scan order.

Claim 26 (previously presented): The method according to claim 24,

wherein

for each transform coefficient being unequal to zero, the sign is indicated by a one-bit symbol (SIGN) and the magnitude is indicated by a binary-coded symbol (ABS) .

Claim 27 (previously presented): The method according to claim 24,

wherein

the magnitude is indicated by a symbol (ABS) in unary binarization or by a symbol (ABS) having a prefix part and a suffix part, wherein the prefix part consists of ones and the suffix part is coded in a Oth order exp-golomb code.

Claim 28 (currently amended): The method according to claim 24,

wherein

blocks containing transform coefficients being unequal to zero are characterized by a one-bit symbol (CBP4) in connection with further syntax elements, ~~such as, for example,~~ including, (CBP) or macro block mode.

Claim 29 (currently amended): The method according to claim 24,

wherein

by transferring a one-bit symbol (SIG) for each coefficient of a block and a one-bit symbol (LAST) for each transform coefficient being unequal to zero of a block, the significance map is coded, wherein the transfer takes place in [[~~a~~]]the scan order, (SIG) serves for identifying transform coefficients being unequal to zero and (LAST) indicates whether there are further transform coefficients being unequal to zero in the block.

Claim 30 (currently amended): The method according to claim [[~~28~~]]9,

wherein

modeling

for the one-bit symbol (CBP4),

for coding the significance map and/or

for coding the coefficient magnitudes

takes place in a context-dependent way.

Claim 31 (previously presented): The method according to claim 29,

wherein

no significance information (SIG, LAST) is transferred for the last scan position of a block.

Claim 32 (previously presented): The method according to claim 24,

wherein

block types of transform coefficients having comparable statistics are summarized to block categories.

Claim 33 (currently amended): An arrangement having at least

one processor and/or chip formed such that a method for coding transform coefficients ~~in picture and/or video coders and decoders~~ can be performed, wherein

for blocks of (video) pictures containing transform coefficients being unequal to zero, a coding of transform coefficients takes place in such a way that, for each block,

a significance map is coded, the significance map specifying the positions of transform coefficients being unequal to zero in the block in a scan order in a context-dependent way using contexts depending on the corresponding scan position of the transform coefficient considered, and subsequently,

in a reverse scan order, starting with the last transform coefficient being unequal to zero within the block, the values (levels) of the transform coefficients being unequal to zero are coded in a context-dependent way using contexts depending on a number of transform coefficients already coded in the reverse scan order having a magnitude of 1 and a number of transform coefficients already coded in the reverse scan order having a magnitude of greater than 1, respectively.

Claim 34 (currently amended): A computer program, stored in a computer readable medium, enabling a computer, after having been loaded into the memory of the computer, to perform a method for coding transform coefficients ~~in picture and/or video coders and decoders~~, wherein

for blocks of (video) pictures containing transform coefficients being unequal to zero, a coding of transform coefficients takes place in such a way that, for each block,

a significance map is coded, the significance map specifying the positions of transform coefficients being unequal to zero in the block in a scan order in a context-dependent way using contexts depending on the corresponding scan position of the transform coefficient considered, and subsequently,

in the reverse scan order, starting with the last transform coefficient being unequal to zero within the block, the values (levels) of the transform coefficients being unequal to zero are coded in a context-dependent way using contexts depending on a number of transform coefficients already coded in the reverse scan order having a magnitude of 1 and a number of transform coefficients already coded in the reverse scan order

having a magnitude of greater than 1, respectively.

Claim 35 (currently amended): A computer-readable storage medium on which a computer program is stored, enabling a computer, after having been loaded into the memory of the computer, to perform a method for coding transform coefficients ~~in picture and/or video coders and decoders~~, wherein

for blocks of (video) pictures containing transform coefficients being unequal to zero, a coding of transform coefficients takes place in such a way that, for each block,

a significance map is coded, the significance map specifying the positions of transform coefficients being unequal to zero in the block in a scan order in a context-dependent way using contexts depending on the corresponding scan position of the transform coefficient considered, and subsequently,

in a reverse scan order, starting with the last transform coefficient being unequal to zero within the block, the values (levels) of the transform coefficients being unequal to zero are coded in a context-dependent way using contexts depending on a number of transform

coefficients already coded in the reverse scan order having a magnitude of 1 and a number of transform coefficients already coded in the reverse scan order having a magnitude of greater than 1, respectively.

Claim 36 (currently amended): A ~~data stream representing a~~ computer program, stored on a network for transfer and enabling a computer, after having been loaded into the memory of the computer, to perform a method for coding transform coefficients ~~in picture and/or video coders and decoders~~, wherein

for blocks of (video) pictures containing transform coefficients being unequal to zero, a coding of transform coefficients takes place in such a way that, for each block,

a significance map is coded, the significance map specifying the positions of transform coefficients being unequal to zero in the block in a scan order in a context-dependent way using contexts depending on the corresponding scan position of the transform coefficient considered, and subsequently,

in a reverse scan order, starting with the last transform coefficient being unequal to zero within the block, the

values (levels) of the transform coefficients being unequal to zero are coded in a context-dependent way using contexts depending on a number of transform coefficients already coded in the reverse scan order having a magnitude of 1 and a number of transform coefficients already coded in the reverse scan order having a magnitude of greater than 1, respectively.

Claim 37 (currently amended): A method for decoding a coding of a significance map and a subsequent coding of values of transform coefficients being unequal to zero for blocks of (video) pictures containing transform coefficients being unequal to zero, the significance map specifying the positions of the transform coefficients being unequal to zero in a scan order, and the coding of values of transform coefficients being unequal to zero comprising coded values of the transform coefficients being unequal to zero in a reverse scan order - starting with the last transform coefficient being unequal to zero, comprising the ~~following steps~~steps of:

decoding the significance mapping in a context-dependent way using contexts depending on the corresponding scan position of the transform coefficient considered; and

decoding the coded values of transform coefficients being

unequal to zero in the reverse scan order in a context-dependent way using contexts depending on a number of transform coefficients already coded in the reverse scan order having a magnitude of 1 and a number of transform coefficients already coded in the reverse scan order having a magnitude of greater than 1, respectively.

Claim 38 (currently amended): A device for decoding a coding of a significance map and a subsequent coding of values of transform coefficients being unequal to zero for blocks of (video) pictures containing transform coefficients being unequal to zero, the significance map specifying the positions of the transform coefficients being unequal to zero in a scan order, and the coding of values of transform coefficients being unequal to zero comprising coded values of the transform coefficients being unequal to zero in a reverse scan order - starting with the last transform coefficient being unequal to zero, comprising:

~~a decoder~~ means for decoding the significance mapping order in a context-dependent way using contexts depending on the corresponding scan position of the transform coefficient considered; and

means for decoding the coded values of transform coefficients

being unequal to zero in the reverse scan order in a context-dependent way using contexts depending on a number of transform coefficients already coded in the reverse scan order having a magnitude of 1 and a number of transform coefficients already coded in the reverse scan order having a magnitude of greater than 1, respectively.

Claim 39 (new): The method according to claim 24, wherein coding the transform coefficients in the reverse scan order comprises

binarizing a magnitude of a each transform coefficient into a sequence of bins,

determining a context for the first bin of the magnitude of each transform coefficient based on a number of transform coefficients already coded in the reverse scan order having a magnitude of 1,

context-adaptively coding the first bins of the transform coefficients using the determined contexts.

Claim 40 (new): The method according to claim 33, wherein the determination of a context for the first bin of the magnitude of each transform coefficient is performed such that a first

predetermined context is used as soon as more than three transform coefficients with a magnitude of 1 have been coded, and a second predetermined context for all remaining transform coefficients being unequal to zero within the block is used, as soon as a transform coefficient having a magnitude greater than 1 has been coded.

Claim 41 (new): The method according to claim 33, wherein coding the transform coefficients in the reverse scan order also comprises

determining a context number for a second to fourteenth bin of the magnitude of each transform coefficient by a number of transform coefficients already coded in the reverse scan order having a magnitude of greater than 1;

context-adaptively coding the second to fourteenth bins of the transform coefficients using the context numbers determined.

Claim 42 (new): The method according to claim 33, wherein coding the transform coefficients in the reverse scan order also comprises

coding x-th bins with x>14 of the magnitude of the transform coefficients using a non-adaptive context.

Claim 43 (new): The method according to claim 1, wherein coding the significance mapping comprises coding the symbols SIG and LAST context-adaptively by use of context numbers indicated by the corresponding scan position of the transform coefficient considered, with the context numbers for SIG and LAST being different.

Claim 44 (new): The method according to claim 24, wherein coding the significance mapping and coding the values of the transform coefficients is performed by arithmetical coding.

Claim 45 (new): A method for decoding a coding of a significance mapping and a subsequent coding of values of transform coefficients being unequal to zero for blocks of (video) pictures containing transform coefficients being unequal to zero, wherein the significance mapping specifies the positions of the transform coefficients being unequal to zero in a scan order and comprises, in the scan order, - except for the last scan position in the scan order - a one-bit symbol (SIG) for each coefficient of the block and a one-bit symbol (LAST) for each significant coefficient of the block, wherein (SIG) serves for identifying significant coefficients and (LAST) indicates whether there are further

significant transform coefficients in the block, and the coding of values of transform coefficients being unequal to zero comprises coded values of the transform coefficients being unequal to zero in a reverse scan order - starting from the last transform coefficient being unequal to zero, comprising the steps of:

arithmetically decoding the significance mapping; and

arithmetically decoding the coded values of transform coefficients being unequal to zero in reverse scan order.

Claim 46 (new): A device for decoding a coding of a significance mapping and a subsequent coding of values of transform coefficients being unequal to zero for blocks of (video) pictures containing transform coefficients being unequal to zero, wherein the significance mapping specifies the positions of the transform coefficients being unequal to zero in a scan order and comprises, in the scan order, - except for the last scan position in the scan order - a one-bit symbol (SIG) for each coefficient of the block and a one-bit symbol (LAST) for each significant coefficient of the block, wherein (SIG) serves for identifying significant coefficients and (LAST) indicates whether there are further significant transform coefficients in the block, and the

coding of values of transform coefficients being unequal to zero comprise coded values of the transform coefficients being unequal to zero in a reverse scan order - starting from the last transform coefficient being unequal to zero, comprising:

means for arithmetically decoding the significance mapping; and

means for arithmetically decoding the coded values of transform coefficients being unequal to zero in reverse scan order.